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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,718	07/21/2003	Joseph R. Allen	200210193-1	7561
22879	7590	11/02/2004	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			SHARP, JEFFREY ANDREW	
			ART UNIT	PAPER NUMBER
			3677	

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/624,718

Applicant(s)

ALLEN ET AL.

Examiner

Jeffrey Sharp

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

- [1] Claims 1-14 are pending.

Specification

- [2] The disclosure is objected to because of the following informalities:

The abstract contains the word '*thereof*'. Applicant is urged to amend line 3 of the abstract to read -- of the mounting member -- instead of '*thereof*'.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

- [3] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

[4] Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by McCormack et al. US-Patent Application Publication 2002/0172574 A1. Refer to McCormack et al. Figures 16 and 33.

McCormack et al. teaches a mounting device for securing an electronic device (226) comprising at least one opening to an equipment rack (see paragraph [0006] lines 3-6) comprising: a mounting member (204) comprising at least one flange (238), an end (250) adapted to be received in an opening of the electronic device (226), and an inner cylindrical portion adapted to receive at least a first fastener (202) and a second fastener, said first fastener having a different thread type than said second fastener, and a securing device (258) mounted on said end portion (250) of said mounting member (204) which is adapted to secure said mounting member (204) to said electronic device (226).

The second fastener is described within an intended use statement, and therefore is considered, but not limiting. The mounting member taught by McCormack et al is capable of receiving a second fastener having a different thread type.

Claim Rejections - 35 USC § 103

[5] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

[6] Claims 1, 4, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tait et al. US-2,967,557 in view of Frattarola et al. US-5,611,654 and in further view of McCormack et al. US-Patent Application Publication 2002/0172574 A1 and Allen US-6,682,282 B2.

Tait et al. teaches:

A mounting device for securing an electronic device (10, Col 1 lines 17-21) comprising at least one opening (12) to an equipment rack (11) comprising a plurality of openings (Col 1 lines 57-60), comprising: a mounting member (21) comprising at least one flange (23), an end, and an inner cylindrical portion (22) adapted to receive at least a first fastener (15), having a first thread type. The first fastener (15) can be removed from the mounting member (21)

Tait et al. does not disclose expressly a portion of the mounting member (21) that is receivable within said at least one opening (12) in said electronic device (10), nor does Tait et al. teach a securing device mounted on said end portion of said mounting member (21) which is

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adapted to secure said mounting member (21) to said electronic device (10). Tait et al. is silent about the possibility of using a second fastener having a second different thread than the first fastener, although the structure taught by Tait et al. is inherently capable of being used in conjunction with a second fastener having a second thread size, so long as the cylindrical portion is of enabling size (see clearance hole 12).

Frattarola et al. teaches a portion of the mounting member that is receivable within said at least one opening (12) in said electronic device (80), and a securing device (60", Figure 7) mounted on the end portion of said mounting member, which is adapted to secure said mounting member to said electronic device (80).

McCormack et al. also teaches a portion (250) of the mounting member (204) receivable within an opening of an electronic device (226), which may be secured to the mounting member loosely to provide means for adjustment and easier alignment (Figures 33 and 34 show a gap between securing device (258) and electronic device (226)).

Allen teaches the advantageous intended use of swappable and interchangeable first (54) and second (65) fasteners having different threads thereon for combined use with the mounting member (46). Allen similarly teaches a mounting member (46, Col 6 line 1) comprising at least one flange (48, Col 6 line 2), an end portion (Col 6 line 3) having an inner cylindrical portion adapted to receive at least a first fastener (54, Col 6 line 8) and a second fastener (65) having differing thread types (Col 5 line 66), and an end portion of the mounting member (46) that is adapted to secure the mounting member (46) to the electronic device (40, Col 3 lines 42-43).

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify the mounting member taught by Tait et al., to comprise the securing device and

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associated spaced mounting means taught by Frattarola et al. (60", Figure 7) and/or McCormack et al (258, Figures 33 and 34), in order to provide a desirable floating clearance for better fastener alignment with the equipment rack openings under undesirable tolerance conditions. See also US-3,346,032 to Gulistan Column 4 lines 57-63. The teachings of Allen make evident the silent, but inherent structural capability of Tait et al. to use multiple fasteners having different threads with the same mounting member, as an advantageous intended use for the mounting device disclosed by Tait et al.

As for claim 1, it would have been obvious from the teachings of Allen, to use two fasteners having different threads or diameters in order to mate with differing mounting holes, so long as the inner cylindrical portion is large enough to permit this use (Tait et al. Col 2 lines 60-63). The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. In re Keller, 642 F. 2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In this regard, a conclusion of obviousness may be based on common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference. In re Bozek, 416 F. 2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

As for claim 4, the mounting member comprises a first flange (60") that abuts the front surface of the electronic device, and a second flange that abuts the securing device, so as to form a gap (see Frattarola et al. Figure 7, Claims 9 and 20). See also McCormack et al. page 5, last 11 lines of paragraph [0056]. McCormack et al. discloses expressly, a flange (238) that abuts the

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electronic device (226), and a flange (252) that abuts the securing device (258), so as to form a gap (visible in Figures 33 and 34).

As for claim 5, Tait et al. teach a biasing device (20) that is positioned within the inner cylindrical portion (22) of the mounting member (21). See also, Frattarola column 4 lines 51-53.

As for claim 6, See Frattarola Figure 7, and Column 4 lines 35-46. See also, US-3,346,032 to Gulistan Column 4 lines 57-63.

[7] Claims 2, 3, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tait et al. in view of Frattarola et al., McCormack et al., and Allen as discussed above, in even further view of Munro US-2,948,317.

Tait et al. v. Frattarola et al., McCormack et al., and Allen teaches all of the limitations of Claim 1; however, fails to disclose expressly openings at least partially extending around the circumference of the mounting member, and a retainer positioned within the openings to engage the first or second fastener in a latched mode, and disengage the first or second fastener in an unlatched mode.

Munro teaches a similar mounting member (17) similar to that of McCormack et al. (204), having at least one flange (19) and openings (20) in which a retainer (21) is inserted to engage the threaded fastener shank (27). The disengaged position in this case, would be the complete or partial removal of retainer (21). See Munro, Figure 2. See also, US-5,704,100 to Swan, which teaches a similar retaining means having a disengaged mode.

At the time of invention, it would have been obvious to one of ordinary skill in the art, to incorporate the slots (20) and retaining member (21) as taught by Munro, on the mounting

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member taught by Tait et al. v. Frattarola et al., in order to provide a faster and easier way to engage and disengage multiple fasteners with the electronic device.

As for claim 3, the inwardly biased resilient legs of the retainer member clip (21) taught by Munro, comprise a larger diameter portion (24) at the open end, allowing for a disengaged mode.

As for claim 5, the retainer member clip (21) taught by Munro is a biasing device, which is positioned within the inner cylindrical portion of the mounting member.

[8] Claims 3, 7-11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tait et al. v. Frattarola et al., McCormack et al., Allen, and Munro, in further view of Peterson US-4,505,058 and Swan US-5,704,100.

Tait et al. v. Frattarola et al, McCormack et al., Allen, and Munro teaches all of the claimed limitations of claim 2, including a clip (Munro 21) having resilient legs biased toward each other connected by a flexible hinge and a smaller and larger diameter portion permitting a latched and unlatched mode; however, fails to disclose expressly an *inner* larger diameter portion permitting an un-latched mode.

Peterson teaches a retainer member (51) having a smaller diameter portion (57) permitting a latched mode with the fastener (21), and an *inner* larger diameter portion (58) permitting an un-latched mode with the fastener (23) without complete removal of the retainer member.

Swan also teaches a retainer member (50) that has a smaller (54) and larger (flats between 52a, 52b) diameter portion, in order to permit a latched and un-latched mode for the

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inserted fastener. Note that the purpose of having a larger diameter portion is to allow clearance for the fastener to be removed from the mounting device (40) without complete removal of the retainer member (50).

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify the retainer member taught by Munro, so that the larger diameter portion is located on an interior surface of the clip complimentary to the fastener as taught by Peterson and Swan, in order to permit an un-latched mode without complete removal of the retainer member from the mounting device.

As for claim 7, the mounting device comprises a) a mounting member (Tait et al. 21) having at least one flange (Tait et al. 23), openings (Munro 20), a receivable end portion (Frattarola et al. 60"), and an inner cylindrical portion (Tait et al. 22), b) a retainer member (Munro 21) having a smaller diameter portion (Munro 23) enabling a latched mode, and a larger diameter portion (Peterson 58, Swan 52ab) enabling an un-latched mode, and c) a securing device (Frattarola et al. 60", and McCormick et al. 258) mounted on the end portion to secure the mounting member (Tait et al. 21) to the electronic device (Tait et al. 10).

As for claim 8, the mounting member comprises a first flange that abuts the front surface of the electronic device, and a second flange that abuts the securing device, so as to form a gap (see Frattarola et al. Figure 7, Claims 9 and 20). See also McCormack et al. page 5, last 11 lines of paragraph [0056]. McCormack et al. discloses expressly, a flange (238) that abuts the electronic device (226), and a flange (252) that abuts the securing device (258), so as to form a gap (visible in Figures 33 and 34).

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As for claim 9, the retainer member is a clip having a pair of resilient legs biased toward one another connected by a flexible hinge (see Munro column 2 lines 24-32). See also, Swan column 3 lines 35-37.

As for claim 10, the mounting device comprises a biasing device (20) within the inner cylindrical portion (see Tait et al. Figure 1).

As for claim 11, Frattarola et al. teach a retainer ring (60") mounted on and secured to the end portion of the mounting member in Figure 7. See also McCormick et al. (258) in Figures 33 and 34).

As for claim 14, the mounting device comprises means for mounting at least first fastener (Allen 54) and a second fastener (Allen 65) having differing thread types to an electric device and equipment rack, means for creating a latched and un-latched mode (Munro 21), and means for securing the mounting member to the electronic device (Frattarola et al. 60", McCormick et al. 258).

[9] Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen US-6,682,282 in view of Swan US-5,704,100.

Allen teaches at least one mounting member (46, Col 6 line 1) comprising at least one flange (48, Col 6 line 2), an end portion (Col 6 line 3) having an inner cylindrical portion adapted to receive at least a first fastener (54, Col 6 line 8) and a second fastener (65) having differing thread types (Col 5 line 66), and means to secure the mounting member (46) to the electronic device (40, Col 3 lines 42-43). Allen also teaches the joining of the first and second fasteners with mating portions of an equipment rack (10, Col 3 lines 25-31).

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However, Allen fails to disclose expressly a retainer member (i.e. 'clip') acting as quick release means to permit an un-latched mode for the removal of a retained first fastener from the mounting member, and a subsequent latched mode after the insertion of a second fastener into the mounting member.

Swan teaches a system having a similar retainer member (50) used to permit both latched and un-latched modes with a fastener of different cross sections (Column 1 lines 38-33, Column 2 lines 30-32). In the instant case, different thread types may be considered different cross-sections.

At the time of invention, it would have been obvious to one of ordinary skill in the art to modify the method and structure taught by Allen, to comprise the retainer member (50) and associated latched and unlatched method steps inherent to the retainer system taught by Swan, in order to facilitate: 1) faster removal of a fastener having a thread size, and 2) easier subsequent insertion and securement of a second fastener having a different thread size, without full removal of the retainer member (see Swan Col 1 lines 10-35).

As for claim 13, Swan's disclosure for the mounting member (40) is not limited by structure, other than by an opening required to allow retainer member (50) to engage the fastener (30). See Swan claim 1 column 4.

Conclusion

[10] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is as follows:

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Prior art documents: US-5,544,992, US-6,468,012, US-2001/0024607A1, US-6,086,480, US-5,338,139, and US-5,865,582 show similar captive fasteners of the prior art.

Prior art documents: US-4,733,987, US-1,976,623, US-4,464,090, US-3,138,188, US-665,272, and US-5,520,490 teach retainer members of the prior art.

Prior art documents: US-3,564,563, and US-5,382,124 show the securing devices and methods of the prior art.

[11] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Sharp whose telephone number is (703) 305-2693. The examiner can normally be reached on 7:30 am - 5:00 pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (703) 306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAS


ROBERT J. SANDY
PRIMARY EXAMINER